

Note: Use additional pages if more space is needed.

BUDGET ITEM NO.	AU NO.	REGION	CAPITAL TYPE (see back)	AFUDC (see back) <input type="checkbox"/> Yes <input type="checkbox"/> No	Estimated Expenditures			
					Year	This Request	Previous Authorization	Total Authorization
223		South(ern)	Storage					
Activity # Investment	104875		106801	PARTIAL AUTHORIZATION <input type="checkbox"/> Yes <input type="checkbox"/> No	2006	\$	\$ 1,850,000	\$ 1,850,000
Activity # Retirement	304875		306801		2007	\$ 1,600,000	\$ 900,000	\$ 2,500,000
Activity # Investment	104878		106803			\$	\$	\$
Activity # Retirement	304878		306803			\$	\$	\$
FILE NO.	NBA / MR / PI / SI NO.	ESTIMATED START DATE	EST. COMPLETION					
		Year 2006	Year 2007	Retired	\$ 100,000	\$ 50,000	\$ 150,000	
		Quarter 2	Quarter 2	Total	\$ 1,700,000	\$ 2,800,000	\$ 4,500,000	

**Project Location**  
Hudson & Lexington

**Project Description**

Retrofit engine-compressor units (2 Cooper 2-cycle & 2 Enterprise 4-cycle) to reduce NOx emissions in order to comply with the USEPA Air Emission Regulations

**Alternatives Considered**

1. Don't run the units.
2. Run the units as is and be subjected to fines and penalties.
3. Retrofit units to be compliant with EPA Air Emission regulations.

**Reason for Request**

Retrofit Engine Compressor units to be compliant with EPA air emission regulations. No capital was allocated for air emissions project in the 2006 budget. This program was newly mandated by the EPA.

**Reason for Budget Revision**

The scope of Phase I needed to be expanded to include the replacement of the jacket water Coolers (+876k) and to include Commissioning & Testing (+276k). There were modification required to the Turbochargers (+186k) not budgeted. Sales tax & Freight (+320k) were not budgeted.

**For Revisions Only**

Revision:

☒ 1 ☐ 2 ☐ 3 ☐ 4

**Reimbursable?**

☐ No

☐ Yes \_\_\_\_%

**Income Taxes on Reimbursable Projects**

☐ No (Public Interest)

☐ Yes (Private Party)

see instructions

**Included in overall budget?**

☐ Yes ☒ No

Dollars and year(s): \*

**Operating Expense Impact (specify in detail)**

\* Represents project \$ increase only.  
No increase in 2007 Storage Area Capital required.

**Economic Assessment Data**

Item (see page 2)	Value
Cost of Capital (after tax)	%
Net Present Value at C/C (after tax)	\$
Internal rate of return (IRR), if applicable	%

**Approvals**

TAG APPROVAL	DATE	I.T.S.C. APPROVAL	DATE
PRINT RECOMMENDED BY	DATE	PRINT APPROVED BY OFFICER	DATE
Joe Deters	03-19-07	Gary Bartlett	03-19-07
RECOMMENDED BY SIGNATURE	DATE	APPROVED BY SIGNATURE - OFFICER	DATE
<i>[Signature]</i>	3-19-07	<i>[Signature]</i>	
APPROVED BY CMT	DATE	APPROVED BY BOARD OF DIRECTORS/FPG	DATE
<i>[Signature]</i>	4/4/07	see attached	EXC
CMT COMPLETION BY	DATE	POST INVESTMENT REVIEW	
		<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Undecided	
		If yes, Quarter Year	
ACCOUNTING APPROVAL - CAPITALIZED SOFTWARE		BUDGET COMPLETION/TOLERANCE	DATE
		CHECK BY	

Financial Analysis and Projects Approval

Date

Forward completed form to: Supervisor Plant Accounting / GO-5 East

# NOx Compliance Project

CMT Meeting  
March 23, 2007

For NOX ~~142~~

# Phase I - Revised Estimate

	Original Budget	New Estimate	Variance
Cooper Lexington	\$ 903,000	\$1,196,242	\$ 293,242 (1)
Enterprise Lexington	\$ 497,000	\$1,032,982	\$ 535,982 (2)
Cooper Hudson	\$ 903,000	\$1,196,242	\$ 293,242
Enterprise Hudson	\$ 497,000	\$1,032,982	\$ 535,982
TOTALS	\$2,800,000	\$4,458,448	\$1,658,448
(1) Cooler Tax & Freight Commission & Testing	+144 k +80 k +69 k	(2) Cooler Turbo Tax & Freight Commissioning & Testing	+293 k +93 k +80 k +69 k

# NOx Project - Phase I Requested Authorization Increase

■ Original Authorization (3/22/06)	\$ 2,800,000
■ <b>Requested Increase</b>	<u>\$ 1,700,000</u>
■ Revised Phase I Project Total	\$ 4,500,000

## NOx Phase I Project Expenditure Update

	<u>Current Est.</u>	<u>Original Est.</u>
2006	\$ 2,250,000	\$ 1,900,000
2007	<u>\$ 2,250,000</u>	<u>\$ 900,000</u>
Total	\$ 4,500,000	\$ 2,800,000

## NOx Phase II Project Expenditure Update (Est)

2007	\$ 1,600,000	\$ 3,000,000
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# NOx Project -Phase II

## Approval Request

	Proposed Budget	Material 2007	Installation 2008
Enterprise #15 - Ancona	\$1,000,000	\$ 500,000	\$ 500,000
Enterprise #31 - Pontiac	\$1,000,000	\$ 500,000	\$ 500,000
Enterprise #14 - Ancona	\$1,000,000	\$ 500,000	\$ 500,000
Stage 1 Engineering Cooper #41 - Pontiac	\$ 100,000	\$ 100,000	
TOTALS	\$3,100,000	\$1,600,000	\$1,500,000

NICOR GAS COMPANY  
EXECUTIVE COMMITTEE  
AND  
BOARD OF DIRECTORS APPROVAL

WP(F-4) 6 6/25

NEW PROJECT

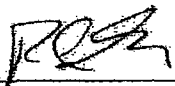
**Budget Item No. 223 – Air Emission Compliance Project**

This project involves retrofitting four Engine-Compressor units to reduce NOx emissions. These reductions have been mandated by the USEPA Subpart Q regulations. These four units must be in compliance with this regulation by May 1, 2007. This project also includes the purchase of emission testing equipment to conduct baseline emission testing in order to establish our current and subsequent level of NOx emissions.

Total Authorization      \$2,800,000

Approved by Executive Committee  
April 12, 2006

Approved by Board of Directors  
April 20, 2006

  
\_\_\_\_\_  
Paul C. Gracey, Jr.  
Secretary of the  
Executive Committee and Board of Directors

Note: Use additional pages if more space is needed.

BUDGET ITEM NO.	AU NO.	REGION	CAPITAL TYPE (see back)	AFUDC (see back)	Estimated Expenditures			
223		South(ern)	Storage	<input type="checkbox"/> Yes <input type="checkbox"/> No	Year	This Request	Previous Authorization	Total Authorization
Activity # Investment	104875			PARTIAL AUTHORIZATION <input type="checkbox"/> Yes <input type="checkbox"/> No	2006	\$ 1,850,000	\$	\$
Activity # Retirement	304875				2007	\$ 900,000	\$	\$
Activity # Investment	106801		104878			\$	\$	\$
Activity # Retirement	306801		304878			\$	\$	\$
FILE NO.	NBA / MR / PI / SI NO.	ESTIMATED START DATE	EST. COMPLETION					
		Year 2006	Year 2007		Retired	\$ 50,000	\$	\$
		Quarter 2	Quarter 2		Total	\$ 2,800,000	\$	\$

106803  
306803

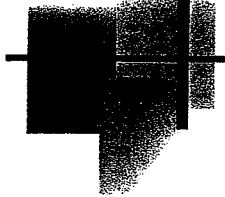
WP(E-4) 6-7/25

<b>Project Location</b> Hudson & Lexington			
<b>Project Description</b> Retrofit engine-compressor units (2 Cooper 2-cycle & 2 Enterprise 4-cycle) to reduce NOx emissions in order to comply with the USEPA Air Emission Regulations			
<b>Alternatives Considered</b> 1. Don't run the units. 2. Run the units as is and be subjected to fines and penalties. 3. Retrofit units to be compliant with EPA Air Emission regulations.			
<b>Reason for Request</b> Retrofit Engine Compressor units to be compliant with EPA air emission regulations. No capital was allocated for air emissions project in the 2006 budget. This program was newly mandated by the EPA.			
<b>Reason for Budget Revision</b>			
<b>For Revisions Only</b> Revision: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4	<b>Reimbursable?</b> <input type="checkbox"/> No <input type="checkbox"/> Yes ____%	<b>Income Taxes on Reimbursable Projects</b> <input type="checkbox"/> No (Public Interest) <input type="checkbox"/> Yes (Private Party) see instructions	<b>Included in overall budget?</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Dollars and year(s):

<b>Operating Expense Impact (specify in detail)</b>
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Economic Assessment Data		Approvals	
Item (see page 2)	Value	TAG APPROVAL	DATE
Cost of Capital (after tax)	%	PRINT RECOMMENDED BY	DATE
Net Present Value at C/C (after tax)	\$	Joe Deters	03/21/06
Internal rate of return (IRR), if applicable	%	RECOMMENDED BY SIGNATURE	DATE
Financial Analysis and Projects Approval		APPROVED BY CMT	DATE
Date		Barbara L. Zylus	3/22/06
		CMT COMPLETION BY	DATE
		ACCOUNTING APPROVAL - CAPITALIZED SOFTWARE	DATE
		POST INVESTMENT REVIEW	DATE
		<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Undecided	DATE
		If yes, Quarter	Year
		BUDGET COMPLETION/ TOLERANCE	DATE
		CHECK BY	DATE

Forward completed form to: Supervisor Plant Accounting / GO-5 East



# Air Emission Compliance

CMT Presentation

March 22, 2006





# Project Description

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- Nicor must reduce established baseline NOx emission by 82% for units in the "SIP" call inventory to meet EPA.
- Still unclear as to exactly which units we have to retrofit in order to achieve the required emission reductions.
- Must meet reductions on 4 units by May 1, 2007.



# Nicor Plan

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- Retrofit 4 Engine/Compressor units to reduce NOx emissions to comply with USEPA Subpart Q regulations.  
(2 units at Hudson & 2 units at Lexington)
- Meet the May 1, 2007 compliance date.
- Will determine which other units will have to be retrofitted as the IEPA plan is written.

# Timetable

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- Design & Testing April - May '06
- Permit Application April '06
- Order Material mid-April '06
- Receive Material Sept - Oct '06
- Dismantle Units Nov - Dec '06
- Installation Jan - Mar '07
- Start-up & Testing Apr '07

# Cost Estimate

■ Cooper 2-cycle (ea)	\$678,250
(ancillary equipment)	<u>200,000</u>
Total:	\$878,250

■ Enterprise 4-cycle (ea)	\$374,500
(ancillary equipment)	<u>100,000</u>
Total:	\$474,500

## Cost Estimate (con't)


■ Hudson (1 Cooper & 1 Enterprise)	\$ 1,352,750
■ Lexington (1 Cooper & 1 Enterprise)	1,352,750
■ Design & Testing	<u>100,000</u>
Total:	\$2,805,500

# Request for Unplanned Capital Project

- No Capital allocated for air emissions project in 2006 Budget. Newly mandated by EPA
- Currently do not anticipate the ability to reallocate funds to accommodate this unplanned expenditure.
- Request authorization for required project to meet EPA mandates:

■ 2006	Baseline test & testing equipment	\$100,000
	Equipment purchases	<u>1,800,000</u>
	Total:	\$1,900,000

- 2007      Remainder of equipment purchases and installation      \$900,000



# Air Emission Compliance

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Executive Committee  
Presentation

April 12, 2006



# Project Description

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- Nicor must reduce established baseline NOx emission by 82% for units in the "SIP" call inventory to meet EPA.
- Still unclear as to exactly how many total units we have to retrofit in order to achieve the required total emission reductions by January, 2009.
- Must meet reductions on 4 units by May 1, 2007.

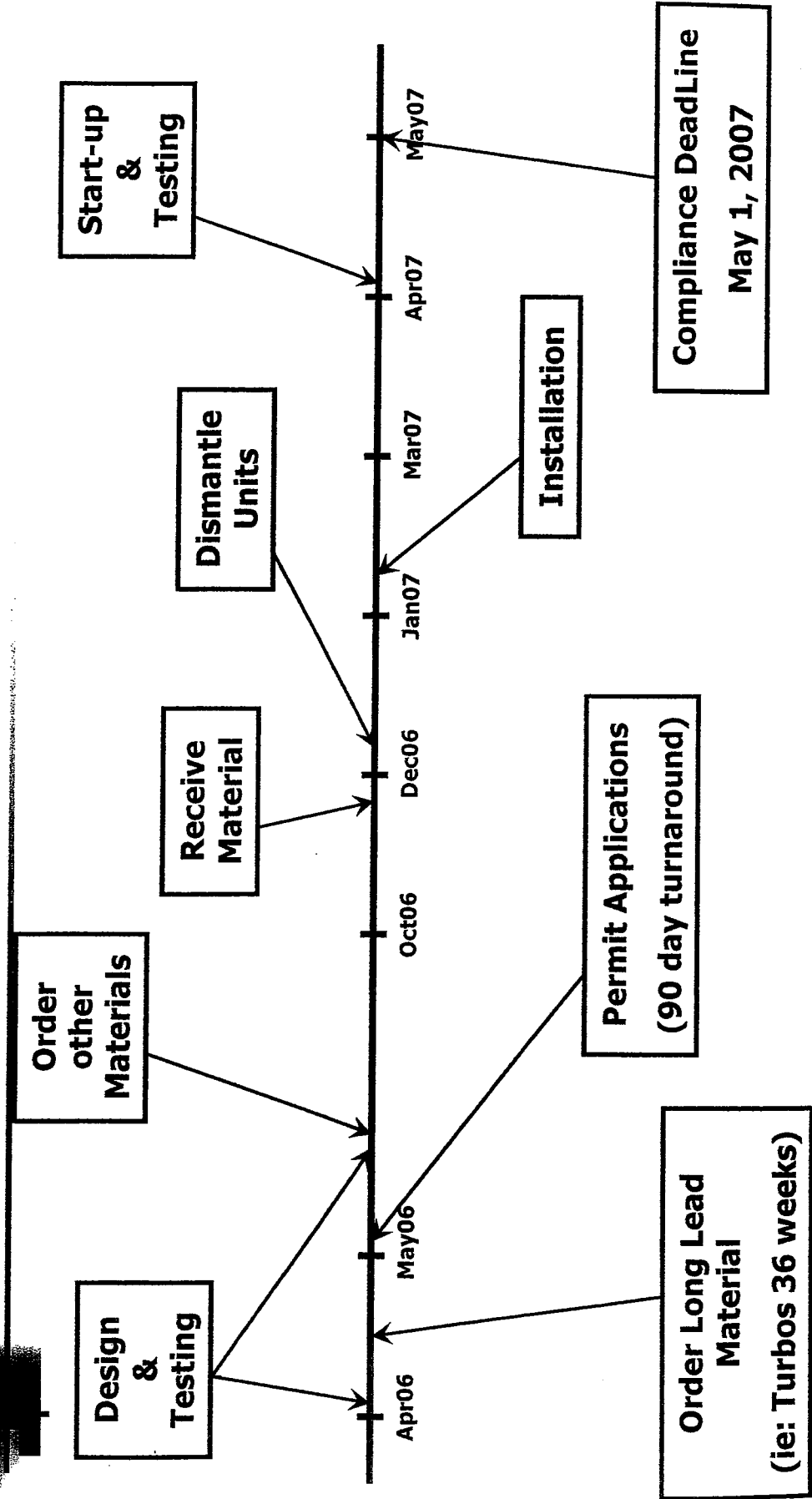


# Nicor Plan

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- Retrofit 4 Engine/Compressor units to reduce NOx emissions to comply with USEPA Subpart Q regulations.  
(2 units at Hudson & 2 units at Lexington)
- Meet the May 1, 2007 compliance date.
- Will determine how many other units will have to be retrofitted as the IEPA plan is written.

# Timeline



## Cost Estimate (con't)

■ Hudson - Cooper	\$ 878,250
- Enterprise	\$ 474,500
■ Lexington - Cooper	\$ 878,250
- Enterprise	\$ 474,500
■ Design & Testing	<u>\$ 100,000</u>
Total:	\$2,805,500

# Request for Unplanned Capital Project

- No Capital allocated for air emissions project in 2006 Budget. Newly mandated by EPA
- Currently do not anticipate the ability to reallocate funds to accommodate this unplanned expenditure.
- Request authorization for required project to meet EPA mandates:

■ 2006	Baseline test & testing equipment	\$100,000
	Equipment purchases	<u>1,800,000</u>
	Total:	\$1,900,000

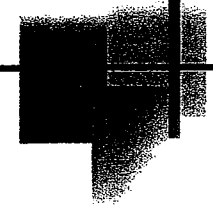
- 2007      Remainder of equipment purchases and installation      \$900,000

# Other Benefits-Fuel Savings

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- Studies still underway to confirm quantities
- Estimate, ~ 10% reduction in fuel
- Depending on hours of operation, (assuming 3 months) - This translates to \$36,000/yr (assuming \$8.00 gas)





# Air Emission Compliance

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Board of Directors  
Presentation  
April 20, 2006

# Project Description

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- Nicor must reduce established baseline NOx emission by 82% for units in the "SIP" call inventory to meet USEPA mandates.
- 4 units must meet reductions by May 1, 2007.
- Nicor may have other units that have to be in compliance by January, 2009. We will know the IEPA rule by then.



# Request for Unplanned Capital Project

- Request authorization for required project to meet EPA mandates:

▪ 2006	Baseline test & testing equipment	\$100,000
	Equipment purchases	<u>1,800,000</u>
	Total:	\$1,900,000

- 2007      Remainder of equipment purchases and installation      \$900,000

- TimeLine

- Key Material      - 36 Week Lead time
- Installation      - Dec '06 thru Mar '07
- Start-up & Testing      - Mar '07 thru Apr '07